

# Mineral Industry Surveys

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#### **SILICON IN NOVEMBER 2002**

In November, domestic production of silicon ferroalloys plus metal, excluding silvery pig iron, was estimated to have decreased by about 8% compared with the corresponding figure for the previous month, according to the U.S. Geological Survey. Domestic shipments and total producer stocks each decreased by 2% compared with those in October 2002. All domestic data for ferrosilicon have been combined to avoid disclosing company proprietary data.

The October trade data included in this report indicated that the volume of silicon metal imports decreased by 24% compared with those of September 2002. Total ferrosilicon imports, on a gross weight basis, were double those of September 2002, with significant increases in the trade categories of "magnesium ferrosilicon," and "other ferrosilicon." On a gross weight basis, total ferrosilicon exports increased by 7%, when compared to those in September 2002, owing primarily to a significant increase in the trade category "other ferrosilicon." Silicon metal exports decreased by about 17% from those in the previous month, with significant decreases in the trade categories "more

than 99.99% silicon," and "99.00%-99.99% silicon."

In November, the International Trade Administration (ITA) announced it had extended the June 1, 2001, through November 30, 2001, Period of Review for the new shipper antidumping review of silicon metal from the People's Republic of China (PRC) to January 14, 2002 (International Trade Administration, 2002). By doing so, the ITA will conduct the new shipper review concurrently with the June 1, 2001, through May 31, 2002, administrative review of silicon metal from the PRC. The ITA expects to issue preliminary results of both reviews on March 3, 2003.

#### **Reference Cited**

International Trade Administration, 2002, Silicon metal from the People's Republic of China (PRC)—Postponement of time limit for preliminary results of new shipper antidumping review in conjunction with administrative review: Federal Register, v. 67, no. 226, November 23, p. 70403-70404.

#### Prices, cents per pound, silicon content

	50% Ferrosilicon <sup>1</sup>	75% Ferrosilicon <sup>2</sup>	Silicon Metal <sup>2</sup>
November 6	44.0-46.0	35.00-37.00	58.0-60.0
November 13	44.0-46.0	36.00-37.50	58.0-60.0
November 20	44.0-46.0	36.00-37.50	59.0-60.0
November 25	44.0-46.0	36.25-37.25	58.0-60.0

<sup>1</sup>Source: Ryan's Notes, North American transaction price.

<sup>2</sup>Source: Platts Metals Week, dealer import price.

 $TABLE\ 1$  U.S. PRODUCTION, SHIPMENTS, AND PRODUCER STOCKS OF SILICON ALLOYS AND METAL IN 2002 1/2/3/

#### (Metric tons)

	Gross production 4/		Net sl	Stocks,	
Material	November	Year to date 5/	November	Year to date 5/	November 30
Ferrosilicon:					
All grades 6/7/	20,800	233,000	16,800	191,000	34,400
Silicon metal:					
Excludes semiconductor grades	8,570	101,000	8,260	94,800	2,650

- 1/ Data are rounded to no more than three significant digits.
- 2/ Includes U.S. Geological Survey estimates.
- $3/\,Data\;for\;silvery\;pig\;iron\;(less\;than\;25\%\;silicon)\;withheld\;to\;avoid\;disclosing\;company\;proprietary\;data.$
- 4/ Includes in-plant consumption, as in production of magnesium ferrosilicon and other miscellaneous alloys.
- 5/ Includes revisions to previous months' data.
- $6/\operatorname{Ferrosilicon}$  categories were aggregated to avoid disclosing company proprietary data.
- 7/ Includes miscellaneous silicon alloys.

 ${\it TABLE~2}$  U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN OCTOBER 2002 1/ 2/

(Metric tons, unless otherwise specified)

					Year to date	
	Gross	Contained		Gross	Contained	
Country	weight	weight	Value	weight	weight	Value
Ferrosilicon:						
More than 55% silicon:						
Canada	484	291	\$334,000	4,180	2,510	\$2,790,000
Malaysia				33	25	54,700
Mexico	41	24	66,600	542	339	480,000
Trinidad and Tobago				11	6	8,590
Total	525	315	401,000	4,760	2,880	3,340,000
Other ferrosilicon:						
Australia	41	8	39,100	508	162	549,000
Brazil	22	11	18,000	43	22	36,200
Canada	363	182	217,000	3,470	1,730	2,100,000
China				48	24	13,100
India				23	11	13,800
Italy	33	17	52,600	81	43	131,000
Japan				336	30	717,000
Korea, Republic of	121	60	134,000	1,230	618	1,550,000
Malaysia				242	64	288,000
Mexico	28	14	32,300	443	223	523,000
Other (8 countries)	5	2	5,300	101	49	151,000
Total	612	295	498,000	6,520	2,980	6,070,000
Total ferrosilicon	1,140	610	899,000	11,300	5,860	9,410,000
Metal:						
More than 99.99% silicon:						
China	55	XX	1,530,000	410	XX	12,600,000
Germany	43	XX	1,880,000	294	XX	13,500,000
Italy	3	XX	540,000	80	XX	7,200,000
Japan	119	XX	7,490,000	2,630	XX	131,000,000
Korea, Republic of	49	XX	1,800,000	376	XX	14,500,000
Malaysia	5	XX	867,000	64	XX	12,500,000
Norway	27	XX	714,000	346	XX	8,880,000
Taiwan	10	XX	316,000	103	XX	4,680,000
Ukraine	14	XX	367,000	106	XX	2,670,000
United Kingdom	8	XX	1,240,000	69	XX	11,400,000
Other (39 countries)	21	XX	1,390,000	239	XX	12,800,000
Total	355	355 e/	18,100,000	4,720	4,720 e/	231,000,000

See footnotes at end of table.

## ${\it TABLE 2--Continued}$ U.S. EXPORTS OF FERROSILICON AND SILICON METAL IN OCTOBER 2002 1/2/

(Metric tons, unless otherwise specified)

				Year to date			
	Gross	Contained		Gross	Contained		
Country	weight	weight	Value	weight	weight	Value	
MetalContinued:							
99.00% - 99.99% silicon:							
Belgium				23	22	\$32,000	
Brazil				40	39	55,900	
Denmark	78	77	\$120,000	164	162	268,000	
Japan				284	282	804,000	
Korea, Republic of				20	20	28,600	
Mexico	7	7	9,570	209	208	350,000	
Nauru				51	51	72,000	
Netherlands Antilles	6	6	10,700	88	88	138,000	
Norway				249	247	351,000	
Singapore				21	20	39,400	
Other (11 countries)				95	94	151,000	
Total	90	89	140,000	1,240	1,230	2,290,000	
Other silicon:							
Canada	217	211	255,000	1,020	989	1,260,000	
Germany	7	7	9,000	329	319	437,000	
Hong Kong	6	6	8,470	172	167	257,000	
Israel	233	226	308,000	506	491	667,000	
Japan	119	115	156,000	945	918	1,380,000	
Korea, Republic of	32	31	42,800	416	404	698,000	
Malaysia	64	62	229,000	228	221	445,000	
Mexico	67	65	90,300	788	765	1,390,000	
Philippines	14	14	94,700	415	403	1,170,000	
Taiwan	64	62	304,000	464	451	970,000	
Other (22 countries)	172	167	379,000	753	730	2,530,000	
Total	994	965	1,880,000	6,030	5,860	11,200,000	
Total silicon metal	1,440	1,410	20,100,000	12,000	11,800	245,000,000	

e/ Estimated. XX Not applicable. -- Zero.

Source: U.S. Census Bureau.

TABLE 3 U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN OCTOBER 2002  $1/\,2/$ 

(Metric tons, unless otherwise specified)

					Year to date		
	Gross	Contained		Gross	Contained		
Country	weight	weight	Value	weight	weight	Value	
Ferrosilicon:							
55% - 80% silicon, over 3% Ca:							
Argentina	11	7	\$16,700	136	83	\$173,000	
Brazil	140	102	94,800	1,080	656 3/	905,000	
Canada	63	41	25,100	84	56	31,700	
China	20	15	13,900	161	145	79,900	
France	18	12	24,500	52	34	70,400	
Germany				40	12	40,500	
Norway				6	4	10,500	
United Kingdom				11	7	58,100	
Total	253	177	175,000	1,570	998	1,370,000	
55% - 80% silicon, Other:							
Brazil	3,070	2,300	1,700,000	3,470	2,600	2,030,000	
Canada	1,010	860	610,000	7,440	5,720	4,750,000	
China	41	31	21,000	2,440	1,830	1,200,000	
France	160	108	304,000	3,130	2,060	5,760,000	
Iceland				15,200	11,400	6,940,000	
Kazakhstan				25,900	19,800	10,400,000	
Norway	286	216	376,000	3,490	2,600	4,580,000	
South Africa				4,890	3,550	2,240,000	
Ukraine				18,500	13,900	7,780,000	
Venezuela	11,900	8,910	6,700,000	46,400	34,800	25,200,000	
Other (5 countries)	57	43	236,000	702	362	1,770,000	
Total	16,500	12,500	9,950,000	132,000	98,600	72,700,000	

See footnotes at end of table.

<sup>1/</sup> Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top ten countries.

<sup>2/</sup> Data are rounded to no more than three significant digits; may not add to totals shown.

# ${\it TABLE~3--Continued}\\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~FERROSILICON~AND~SILICON~METAL~IN~OCTOBER~2002~1/~2/}$

(Metric tons, unless otherwise specified)

	G	<b>a</b>			Year to date	
	Gross	Contained		Gross	Contained	
Country	weight	weight	Value	weight	weight	Value
FerrosiliconContinued:	_					
More than 90% silicon:	_			4.4	2 200	e220,000
China	- ======			44	2,380 3	3/ \$220,000
Magnesium ferrosilicon:	-		#120 000		405	715.000
Argentina	_ 180	81	\$130,000	1,110	487	745,000
Brazil	_ 159	72	97,100	3,120	1,410	2,000,000
Canada	_ 364	177	237,000	1,360	648	920,000
China	_ 48	21	41,600	3,390	1,710	2,550,000
France	_			20	9	22,200
Germany	_			5	2	12,000
Japan	_ 32	7	28,000	179	78	342,000
Korea, Republic of	3,640	786	2,340,000	3,640	786	2,340,000
Norway	1,060	497	858,000	8,780	4,060	7,140,000
Ukraine	19	9	6,940	37	18	14,900
Other (Slovenia)				4	1	6,480
Total	5,500	1,650	3,740,000	21,600	9,210	16,100,000
Other ferrosilicon:						
Brazil	20	11	33,700	73	45	89,700
Canada	760	235	582,000	9,460	3,280	6,660,000
China	- 			40	20	66,100
France	14	5	18,500	30	13	56,300
Italy	- 		,	94	41	28,600
Norway	- 			23	4	18,100
Russia	1,540 3/	14 3	427,000	1,540	3/ 14 3	3/ 427,000
Ukraine	114	55	41,600	1,010	463	321,000
United Kingdom	- 			2	1	2,690
Total	2,450	319	1,100,000	12,300	3,880	7,670,000
Total ferrosilicon	24,700	14,600	15,000,000	167,000	115,000	98,100,000
Metal:		,	- , ,			,,
More than 99.99% silicon:	=					
Belgium	-	XX		4	XX	15,700
China	(4/)	XX	8,250	19	XX	412,000
Cyprus	- ("/	XX		54	XX	80,000
Germany	- 17	XX	1,870,000	318	XX	38,800,000
Finland		XX		12	XX	54,900
Italy	- 1	XX	123,000	255	XX	10,500,000
Japan	- 22	XX	722,000	356	XX	11,000,000
Korea, Republic of	- 37	XX	240,000	106	XX	1,420,000
Spain	- 37 1	XX	6,120	13	XX	49,300
Taiwan	- 1	XX	0,120	4	XX	83,100
Other (11 countries)	- 2	XX	119,000	13	XX	1,260,000
Total	81	81 e/				
99.00% - 99.99% silicon:		81 6/	3,080,000	1,150	1,150 €	63,600,000
	- 900	775	762 000	5 700	5 620	5 500 000
Argentina	- 800	775	762,000	5,790	5,620	5,500,000
Australia	- 4.000	4.020		396	393	413,000
Brazil	4,860	4,820	6,300,000	30,400	30,200	39,100,000
Canada	1,540	1,530	1,860,000	11,100	11,900	13,400,000
Germany	_ 480	477	869,000	1,380	1,370	2,490,000
Norway	_ 5	5	57,000	3,370	3,350	5,090,000
Russia				13,200	13,100	14,500,000
South Africa	1,440	1,430	1,860,000	17,100	17,000	19,500,000
Spain				1,480	1,470	1,420,000
Saudi Arabia				757	751	671,000
Other (10 countries)	72 3/	61 3		1,370	1,330	1,460,000
Total	9,200	9,100	11,800,000	86,500	86,500	104,000,000

See footnotes at end of table.

## ${\it TABLE~3--Continued}$ U.S. IMPORTS FOR CONSUMPTION OF FERROSILICON AND SILICON METAL IN OCTOBER 2002 1/2/

(Metric tons, unless otherwise specified)

	Gross	Contained		Gross	Contained	
Country	weight	weight	Value	weight	weight	Value
MetalContinued:						
Other silicon:						
Canada	180	176	\$213,000	1,700	1,670	\$2,020,000
China	120	118	106,000	3,680	3,520	2,750,000
Germany	60	59	52,300	220	216	188,000
Korea, Republic of	200	197	148,000	580	570	464,000
Norway	18	18	53,000	3,280	3,220	2,970,000
Russia				16,800	16,500	13,700,000
Saudi Arabia				143	140	122,000
South Africa				8,990	8,670	8,140,000
United Arab Emirates	154	151	128,000	671	661	561,000
Vietnam				200	198	153,000
Other (8 countries)	129	93	147,000	276	138	328,000
Total	861	812	847,000	36,500	35,500	31,400,000
Total silicon metal	10,100	9,990	15,800,000	124,000	123,000	199,000,000

e/ Estimated. XX Not applicable. -- Zero.

Source: U.S. Census Bureau.

<sup>1/</sup> Presentation of monthly data is based on the year-to-date quantities (gross weight) of the top ten countries.

 $<sup>2\!/</sup>$  Data are rounded to no more than three significant digits; may not add to totals shown.

 $<sup>\</sup>ensuremath{\mathrm{3/}}$  All or part of these data have been referred to the U.S. Census Bureau for verification.

<sup>4/</sup> Less than 1/2 unit.